

February 27, 1997

Commissioner Michal Moore, Commissioner and Presiding Member
Commissioner Jananne Sharpless, Commissioner and Member
Renewables Program Committee
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5504

Re: Docket No. 96-REN-1890

Dear Commissioners Moore and Sharpless:

Staff of the Bay Area Air Quality Management District is providing these comments on the Committee Draft titled "Policy Report on AB 1890 Renewables Funding", dated February 14, 1997 (for the Committee Hearing on February 27, 1997). They are being e-mailed to the Docket Office at "DOCKET@energy.state.ca.us" on February 27. Any further communication on the matter will be handled by letter directly to you.

The District appreciates the opportunity to present its views on the well-prepared Draft. Page numbers referred to are those in the Committee Draft.

AB 1890 directs the Energy Commission to provide the Legislature, by March 31, 1997, with recommendations on market-based mechanisms to allocate the renewables fund (\$540 million). The recommended options and implementation mechanisms are to result in allocating at least 40 percent of the fund to existing renewables and at least 40 percent of the fund to the combined total for new and emerging renewables (page 2).

The District believes the overall fund allocation and distribution rationale within the Existing Technologies Account is reasonable and workable. In particular, it feels the fund allocation should aim to help achieve the overall goal of the deregulation process: providing a competitive marketplace for generating and selling electricity. Support for developing new and emerging technologies would help assure Californians of the greatest opportunity to bring to market viable, cost-effective renewable technologies. The District believes catalytic combustion turbines should be considered as a new technology and given support. As we have often seen in other technical areas, the future may provide advances we have not envisioned in the present. Allocation of funds to enhance the identification, evaluation and development of such potential future technologies should be stressed.

Table 2 and Figure 2 (page 14) show that the amount of money allocated to the Emerging Technologies Account remains at a static 10 percent of total renewables funding, for each of the four years it is available (1998 through 2001), while the Customer-Side Account grows from 9 percent to 21 percent of total renewables funding, over that period. In the long run, viable technologies in the post-deregulation period

would best rely on their inherent financial attributes to thrive, without consumer subsidy or rebate. While recognizing the value of providing incentives for consumers to seek and buy "green" renewable electricity, the District believes the Customer-Side Account should not be given such steep funding increases. Instead, its growth rate should be lowered and the amount not included should be added to the Emerging Technologies Account. The District suggests a rise in the Customer-Side Account from 9 to 15 percent, rather than 9 to 21 percent, over that period. The amount removed would be added to the Emerging Technologies Account, resulting in it rising from 10 to 16 percent of the total funding, over that period. In line with this expanded funding for potential emerging technologies, the District also suggests expanding proposed definitions (page 42) so they include items such as tides, ocean thermal gradients and ocean currents, as well as a general term to acknowledge other technologies, possibly unidentified at this time.

A major value of the approach the District suggests is that it provides a "softer landing" in the marketplace beyond 2001, which is likely to rely more on the inherent availability, reliability and financial attributes of each technology, as to whether it remains competitive and viable in the long run. Reducing customer-side funding helps the marketplace more naturally sort out the viable from the non-viable technologies and provides a more natural adjustment. This should avoid possible "free fall" conditions and attendant dislocations similar to the "off-the-cliff" situation qualifying facilities face, when their standard offer contracts (providing fixed energy prices) come to a close.

The District agrees with CEC staff that fuel cells should be exempt from the competitive transition charge (CTC) (pages 40 and 41). This is because they use a technology which generates electricity without producing nitrogen oxides, a precursor in the photochemical production of ozone. However, the District has reservations regarding the broad application of that exemption to both microcogeneration facilities and cogeneration facilities that create electricity by combusting volatile organic waste gases generated by other industrial processes.

AB 1890 requires the Commission to include consideration of the need for mechanisms to ensure that microcogeneration and cogeneration facilities using pollution in their processes remain competitive in the electric services market (page 39). Though a goal of the Committee's proposed distribution mechanism is to respect proposals from industry representatives and stakeholders who participated in the Commission's proceedings (page 15), as it certainly should, these technologies need to be carefully evaluated to be sure they are addressed in a manner consistent with the intent of AB 1890, regarding renewables.

For example, if a microcogeneration facility does not use a renewable fuel, it does not appear to be eligible for a CTC exemption and should not be given one. The case for a cogeneration facility using energy from environmental pollution is less clear, since it is functioning in a dual capacity, both as an electricity generator and as an air

pollution abatement device, to help a facility meet air district emission regulations. Though not using renewable resources in the strict sense, such a facility is performing a needed function that improves air quality, and a CTC exemption for it may be reasonable.

However, the extension of this approach to microcogeneration facilities in general appears to be inconsistent with the intent of AB 1890. This is because unlike a fuel cell, this type of facility, e.g., an internal combustion engine, uses a high temperature combustion process which produces nitrogen oxides, the ozone precursor absent from fuel cell use. (It produces orders-of-magnitude greater amounts of this pollutant, per kWh electricity generated, as compared to emissions from well-controlled boilers). Application of the CTC exemption to microcogeneration facilities using a typical fossil fuel ignores these differences and would provide them with overt, but unstated, subsidies to which they do not appear to be entitled. It works to the disadvantage of technologies that do use renewable resource fuels.

The District has, in the past, communicated its concerns to the Commission about deregulation leading to an increase in these highly-polluting distributed generation facilities (letters of June 14, 1995 and July 28, 1995 regarding ER-94, and November 29, 1995 regarding ER-96). In addition, District staff participated in the recent Government Conference on the Environment in Sacramento on February 21, 1997 and presented the District's concern about the use of highly-polluting distributed generation internal combustion facilities.

Finally, it was noted that a successfully competitive renewables market will be characterized, in part, by prices that reflect costs without hidden subsidies or unpriced benefits (page 5). The environmental cost of generating electricity by each method of power generation should somehow be reflected in its respective price, thereby allowing the market to decide what the truly more cost-effective methods of generation are (reference: the District's letter of Dec. 3, 1996 to the Commission on this docket).

Thank you for the opportunity to provide you with these comments. Please don't hesitate to contact me at (415) 749-4668 if you have questions.

Sincerely,

Michael Rothenberg
Advanced Projects Advisor
Bay Area Air Quality Management District